

ABSTRACT

The present invention relates generally to inhibitors useful to prevent, reduce, substantially reduce or eliminate degradation of nucleic acid templates during nucleic acid synthesis. Such inhibitors of the invention preferably prevent adverse chemical reactions during reverse transcription, which result in degradation of RNA molecules, especially messenger RNA (mRNA) molecules. The invention also relates to compositions comprising inhibitors of the invention, and to methods of producing, amplifying, or sequencing nucleic acid molecules (particularly cDNA molecules) using these compositions, particularly at elevated temperatures. The invention also relates to nucleic acid molecules produced by these methods, to vectors and host cells comprising these cDNA molecules and to the use of such nucleic acid molecules to produce desired polypeptides. The invention further relates to kits comprising such inhibitors or compositions.